02/25/2005 10/785,447

(FILE 'HOME' ENTERED AT 15:14:35 ON 25 FEB 2005)

FILE 'WPIX, INPADOC, JAPIO' ENTERED AT 15:14:43 ON 25 FEB 2005 E DE2003-10307814/AP, PRN

6 S E3-E4 L1

02/25/2005 10/785,447

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ANSWER 1 OF 6 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
L1
     2004-680242 [67]
                        WPIX
ΑN
DNN
    N2004-539254
     Flat-type gradient magnetic field coil for nuclear-spin tomography
TΙ
     apparatus, has circular vortex whose inner conductor lead is arranged at
     exterior of support plate supporting winding board.
DC
     P31 S01 S03 S05 V02
     VOM ENDT, A; ENDT, A V
IN
PΑ
     (SIEI) SIEMENS AG; (ENDT-I) ENDT A V
CYC
    JP 2004255182 A 20040916 (200467)*
GB 2400913 A 20041027 (200470)
DE 10307814 A1 20041125 (200477)
                                                  9
PΙ
    US 2004227516 A1 20041118 (200477)
     CN 1525191 A 20040901 (200478)
     KR 2004076221 A 20040831 (200504)
ADT JP 2004255182 A JP 2004-45840 20040223; GB 2400913 A GB 2004-3962
     20040223; DE 10307814 A1 DE 2003-10307814 20030224; US
     2004227516 A1 US 2004-785447 20040224; CN 1525191 A CN 2004-6000 20040224;
     KR 2004076221 A KR 2004-12221 20040224
PRAI DE 2003-10307814
                          20030224
     JP2004255182 A UPAB: 20041019
     NOVELTY - A winding board (W) has circular vortex (2) whose inner
     conductor lead (X) is arranged at the exterior of a support plate
     supporting the winding board.
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for
     flat-type gradient magnetic field coil manufacturing method.
          USE - For nuclear-spin tomography apparatus used in field of medical
     treatment and biophysics.
          ADVANTAGE - Simplifies the structure of gradient magnetic field coil
     effectively.
          DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of
     the flat-type gradient magnetic field coil.
          circular vortex 2
     shallow groove 3
          outer conductor lead 6
     winding board W
          inner conductor lead X
     Dwg.1a/4
     2004-680242 [67]
ΑN
                        WPIX
DNN N2004-539254
ΤI
     Flat-type gradient magnetic field coil for nuclear-spin tomography
     apparatus, has circular vortex whose inner conductor lead is arranged at
     exterior of support plate supporting winding board.
     P31 S01 S03 S05 V02
DC
IN
     VOM ENDT, A; ENDT, A V
PA
     (SIEI) SIEMENS AG; (ENDT-I) ENDT A V
CYC 6
PI
     JP 2004255182 A 20040916 (200467)*
                                                       A61B005-055
     GB 2400913 A 20041027 (200470)
                                                       G01R033-385
                                                       G01R033-385
     DE 10307814
                    A1 20041125 (200477)
                                                       G01V003-00
     US 2004227516 A1 20041118 (200477)
                    A 20040901 (200478)
                                                       G01R033-38
     CN 1525191
                                                       H01F005-02
                    A 20040831 (200504)
     KR 2004076221
ADT JP 2004255182 A JP 2004-45840 20040223; GB 2400913 A GB 2004-3962
     20040223; DE 10307814 A1 DE 2003-10307814 20030224; US
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2004227516 Al US 2004-785447 20040224; CN 1525191 A CN 2004-6000 20040224; KR 2004076221 A KR 2004-12221 20040224 PRAI DE 2003-10307814 20030224 ICM A61B005-055; G01R033-38; G01R033-385; G01V003-00; H01F005-02 ICS H01F007-00; H01F041-04 JP2004255182 A UPAB: 20041019 AB NOVELTY - A winding board (W) has circular vortex (2) whose inner conductor lead (X) is arranged at the exterior of a support plate supporting the winding board. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for flat-type gradient magnetic field coil manufacturing method. USE - For nuclear-spin tomography apparatus used in field of medical treatment and biophysics. ADVANTAGE - Simplifies the structure of gradient magnetic field coil effectively. DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the flat-type gradient magnetic field coil. circular vortex 2 shallow groove 3 outer conductor lead 6 winding board W inner conductor lead X Dwg.1a/4 EPI GMPI FS FA AB; GI EPI: S01-E02A2; S01-E02A8A; S03-E07A; S03-E07C; S05-D02B1; V02-F01G; MC V02-F03B ANSWER 2 OF 6 INPADOC COPYRIGHT 2005 EPO on STN L1LEVEL 1 249746642 INPADOC ED 20041125 EW 200448 UP 20041203 UW 200449 AN Gradientenspulen und Verfahren zur Herstellung von Gradientenspulen fuer TI MRT-Systeme. VOM ENDT, AXEL TN INS VOM ENDT AXEL INA DF. PA SIEMENS AG PAS SIEMENS AG PAA DΕ TLGerman DTPatent DEA1 DOCUMENT LAID OPEN (FIRST PUBLICATION) PIT A1 20041125 PΙ DE 10307814 ΑI DE 2003-10307814 A 20030224 PRAI DE 2003-10307814 A 20030224 (EDPR 20040422) Die vorliegende Erfindung bezieht sich allgemein auf ein Verfahren zur Herstellung einer Gradientenspule wie sie in der Kernspintomographie (Synonym: Magnetresonanztomographie; MRT) eingesetzt werden. Dabei bezieht sich die vorliegende Erfindung insbesondere auf eine neue Technik zur Herstellung von Scheiben- bzw. Sattelspulen.

Die erfindungsgemaesse Gradientenspule weist eine auf einer ersten Flaeche zugeordnete spiralfoermige Spule (2) und eine innere (X bzw. Y) und eine aeussere Leiterzufuehrung (6) der Spule (2) auf,

wobei die innere Leiterzufuehrung (X bzw. Y) auf einer zweiten, zur

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ersten beabstandeten Flaeche angeordnet ist. Die erfindungsgemaesse Gradientenspule ist dadurch gekennzeichnet, dass die Spule (2) mit ihren Leiterzufuehrungen (X bzw. Y bzw. 6) aus einem durchgehenden einteiligen elektrischen Leiter besteht.

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LEVEL 1
      249746642 INPADOC ED 20041125 EW 200448 UP 20041203 UW 200449
AN
TΙ
     Gradientenspulen und Verfahren zur Herstellung von Gradientenspulen fuer
     MRT-Systeme.
     VOM ENDT, AXEL
IN
     VOM ENDT AXEL
INS
     DE
INA
     SIEMENS AG
PA
PAS
      SIEMENS AG
PAA
     DE
TL
     German
DT
     Patent
PIT
     DEA1 DOCUMENT LAID OPEN (FIRST PUBLICATION)
                          A1 20041125
PΙ
     DE 10307814
     DE 2003-10307814
                          A 20030224
AΙ
PRAI DE 2003-10307814
                          A 20030224
                                        (EDPR 20040422)
ICM
      (7) G01R033-385
      (7) H01F041-04
TCS
     G01R33/385
EPC
     ANSWER 3 OF 6 INPADOC COPYRIGHT 2005 EPO on STN
L1
LEVEL 1
      249246359 INPADOC ED 20041125 EW 200448 UP 20041216 UW 200451
AN
ΤI
      Gradient coil for MRT and method for making same.
      ENDT AXEL VOM
IN
INS
      ENDT AXEL VOM
INA
     GB
PA
     ENDT AXEL VOM
PAS
     ENDT AXEL VOM
PAA
     GB
TL
     English
DT
     Patent
PIT
     USAA PATENT APPLICATION PUBLICATION (PRE-GRANT)
PΙ
     US 2004227516 AA 20041118
                          A 20040224
     US 2004-785447
AΙ
PRAI DE 2003-10307814
                         A 20030224
                                          (EDPR 20040422)
OSDW 2004-680242
AΒ
      In a method to produce a gradient coil for use in magnetic resonance
      tomography, suitable for producing planar coils, saddle coils. a spiral
      coil is arranged on a first surface with an inner conductor feed section
     and an outer conductor feed section of the coil, with the inner conductor
     feed arranged on a second surface separated from the first surface. The
      coil, together with its conductor feed sections, a continuous unitary
     electrical conductor. The inner conductor feed is arranged outside of the
     carrier plate.
LEVEL 1
      249246359 INPADOC ED 20041125 EW 200448 UP 20041216 UW 200451
AN
      Gradient coil for MRT and method for making same.
TI
IN
      ENDT AXEL VOM
INS
      ENDT AXEL VOM
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INA
     GB
     ENDT AXEL VOM
PA
PAS
     ENDT AXEL VOM
PAA GB
   English
TL
    Patent
DT
PIT USAA PATENT APPLICATION PUBLICATION (PRE-GRANT)
PI US 2004227516 AA 20041118
                        A 20040224
ΑI
    US 2004-785447
                        A 20030224 (EDPR 20040422)
PRAI DE 2003-10307814
OSDW 2004-680242
ICM (7) G01V003-00
EPC G01R33/385
NCL 324318
L1
     ANSWER 4 OF 6 INPADOC COPYRIGHT 2005 EPO on STN
LEVEL 1
    245694837 INPADOC ED 20041028 EW 200444 UP 20050217 UW 200507
AN
     GRADIENT MAGNETIC FIELD COIL FOR MAGNETIC RESONANCE TOMOGRAPHY APPARATUS
TI
     AND ITS PRODUCTION METHOD.
     ENDT AXEL VOM
IN
INS ENDT AXEL VOM
     SIEMENS AG
PA
PAS SIEMENS AG
    English
{
m TL}
    Patent
DT
PIT JPA2 DOCUMENT LAID OPEN TO PUBLIC INSPECTION
   JP 2004255182 A2 20040916
PΙ
     JP 2004-45840
                        A 20040223
ΑI
PRAI DE 2003-10307814 A 20030224 (EDPR 20040422)
OSDW 2004-680242
LEVEL 1
AN 245694837 INPADOC ED 20041028 EW 200444 UP 20050217 UW 200507
     GRADIENT MAGNETIC FIELD COIL FOR MAGNETIC RESONANCE TOMOGRAPHY APPARATUS
TI
     AND ITS PRODUCTION METHOD.
    ENDT AXEL VOM
ΤN
INS ENDT AXEL VOM
    SIEMENS AG
PA
PAS SIEMENS AG
   English
TL
    Patent
DT
PIT JPA2 DOCUMENT LAID OPEN TO PUBLIC INSPECTION
PI JP 2004255182 A2 20040916
AI JP 2004-45840 A 20040223
PRAI DE 2003-10307814 A 20030224 (EDPR 20040422)
OSDW 2004-680242
ICM (7) A61B005-055
ICS (7) G01R033-385
ICA (7) H01F005-00; (7) H01F005-04
L1
     ANSWER 5 OF 6 INPADOC COPYRIGHT 2005 EPO on STN
LEVEL 2
AN 232120452 INPADOC ED 20041028 EW 200444 UP 20041203 UW 200449
     Gradient Coils and Method of Manufacturing Gradient Coils for MRT
ΤI
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Systems.

AXEL * VOM ENDT IN INS VOM ENDT AXEL

INA

* SIEMENS AKTIENGESELLSCHAFT; * SIEMENS AKTIENGESELLSCHAFT PA

PAS SIEMENS AG

DE PAA

TLEnglish

Patent DT

PIT GBA1 APPLICATION PUBLISHED

A1 20041027 PI GB 2400913 AI GB 2004-3962 A 20040223 PRAI DE 2003-10307814 A 20030224

(EDPR 20040422)

The present invention concerns, in general, a method of manufacturing a gradient coil such as is used in nuclear spin tomography (synonym: magnetic resonance tomography, MRT). The present invention concerns, in particular, a new technique for manufacturing disc or saddle coils. The gradient coil according to the invention has a spiral coil (2) which is arranged on a first surface, and an inner (X or Y) and an outer conductor lead-in (6) for the coil (2). The inner conductor lead-in (X or Y) is arranged on a second surface at a distance from the first. The coil with its conductor lead-ins (X or Y or. 6) consists of a continuous, one-part electrical conductor. The gradient coil according to the invention is characterized in that the inner conductor lead-in (X) is arranged outside the support plate (T).

LEVEL 2

232120452 INPADOC ED 20041028 EW 200444 UP 20041203 UW 200449 ANGradient Coils and Method of Manufacturing Gradient Coils for MRT ΤI

Systems.

IN AXEL * VOM ENDT

INS VOM ENDT AXEL

INA

PA * SIEMENS AKTIENGESELLSCHAFT; * SIEMENS AKTIENGESELLSCHAFT

PAS SIEMENS AG

PAA

TLEnglish

DТ Patent

PIT GBA1 APPLICATION PUBLISHED

A1 20041027 PI GB 2400913

AI GB 2004-3962 A 20040223 PRAI DE 2003-10307814 A 20030224 (EDPR 20040422)

ICM (7) G01R033-385

EPC G01R33/385

NCL G1N NG38C G38C

- L1ANSWER 6 OF 6 JAPIO (C) 2005 JPO on STN
- AN JAPIO
- GRADIENT MAGNETIC FIELD COIL FOR MAGNETIC RESONANCE TOMOGRAPHY APPARATUS TI AND ITS PRODUCTION METHOD
- IN ENDT AXEL VOM
- PA SIEMENS AG
- PΙ JP 2004255182 A 20040916 Heisei
- AΙ JP 2004-45840 (JP2004045840 Heisei) 20040223
- PRAI DE 2003-1030781420030224
- PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2004 SO
- PROBLEM TO BE SOLVED: To provide a gradient magnetic field coil for a AΒ

02/25/2005 10/785,447

magnetic resonance tomography apparatus in which the structure of the gradient magnetic field coil is simplified and its production method. SOLUTION: A spiral coil (2) arranged in a first face and an inward conductor lead (X or Y) and an outward conductor lead (6) of the coil (2) are provided, and the inward conductor lead (X or Y) is arranged in a second face which is situated away from the primary aspect. In the gradient magnetic field coil for the magnetic resonance tomography device in which the coil consists of contiguous integrated conductors together with the conductor lead, the inward conductor lead (X) is arranged on the outside of a support plate (T). COPYRIGHT: (C) 2004, JPO&NCIPI

AN 2004-255182 JAPIO

- TI GRADIENT MAGNETIC FIELD COIL FOR MAGNETIC RESONANCE TOMOGRAPHY APPARATUS AND ITS PRODUCTION METHOD
- IN ENDT AXEL VOM SIEMENS AG
- PI JP 2004255182 A 20040916 Heisei
- AI JP 2004-45840 (JP2004045840 Heisei) 20040223

DE 2003-1030781420030224

- SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2004
- IC ICM A61B005-055 ICS G01R033-385
- ICA H01F005-00; H01F005-04
- PROBLEM TO BE SOLVED: To provide a gradient magnetic field coil for a magnetic resonance tomography apparatus in which the structure of the gradient magnetic field coil is simplified and its production method. SOLUTION: A spiral coil (2) arranged in a first face and an inward conductor lead (X or Y) and an outward conductor lead (6) of the coil (2) are provided, and the inward conductor lead (X or Y) is arranged in a second face which is situated away from the primary aspect. In the gradient magnetic field coil for the magnetic resonance tomography device in which the coil consists of contiguous integrated conductors together with the conductor lead, the inward conductor lead (X) is arranged on the outside of a support plate (T). COPYRIGHT: (C)2004, JPO&NCIPI

=> HIS

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"HELP COMMANDS" at an arrow prompt (=>).